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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,529	04/22/2004	Scott Mordin Hoyte	137243	7322
7590 07/11/2008				
John S. Beulick Armstrong Teasdale LLP Suite 2600 One Metropolitan Square St. Louis, MO 63102			EXAMINER JARRETT, RYAN A	
			ART UNIT 2121	PAPER NUMBER
			MAIL DATE 07/11/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/829,529

**Applicant(s)**

HOYTE ET AL.

**Examiner**

Ryan A. Jarrett

**Art Unit**

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 May 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 9-19 is/are allowed.  
6) ☒ Claim(s) 1-8 and 20-22 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Different Examiner***

It is noted that this case has been assigned to a different examiner. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (571) 272-3742. The examiner can normally be reached on 10:00-6:30 M-F.

### ***Response to Arguments***

Applicant's arguments filed 05/21/08 have been fully considered but they are not persuasive.

In response to Applicant's arguments as they relate to claims 1 and 20, it is noted that Blevins et al. teaches comparing the derived quantity to a measured process parameter (e.g., Fig. 3: auto-tuning parameters derived in blocks 66 and 76 are compared to measured process parameters 60 in PID loop 76 in order to generate output 64).

It is also noted that claim 20 as amended contains some deficiencies with respect to definiteness, as detailed below.

It is also noted that the claim recitation "to verify an operability of the at least one sensor" of claims 1 and 20 is not positively recited, so no patentable weight can be given to this recitation.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites the limitation "the measured process parameter quantity" in line 8. There is insufficient antecedent basis for this limitation in the claim, particularly with respect to "quantity". There is also insufficient antecedent basis with respect to "the measured process parameters" recited in line 7. Furthermore, it is unclear why measured process parameters are being compared to measured process parameters in line 8. There appears to be key information missing.

Claims 21 and 22 depend from claim 20 and incorporate the same deficiencies.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

As best understood (due to indefiniteness issues), claims 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Blevins et al. US 6,445,962.

**Regarding claim 20**

Blevins teaches "a computer program embodied on a computer readable medium for monitoring a plant, the plant having a plurality of equipment combinations operating interactively with each other and with individual equipment" (e.g. FIG. 1, plurality of devices communicate interactively with one another as in col. 3 lines 22-49 and col. 6 lines 1-6), "said program comprising a code segment that controls a computer that receives a plurality of process parameters from sensors operatively coupled to the equipment combinations and individual equipment" (e.g. col. 3 lines 37-49, col. 5 lines 4-18, and col. 7 lines 2-16, measured data are collected) "and then derives values for process parameters using the measured process parameters" (e.g. col. 3 lines 40-45 and col. 9 lines 57-63, using sets of rules to determine new tuning parameters); "compares the measured process parameter quantity to a measured process parameter (e.g., Fig. 3: auto-tuning parameters derived in blocks 66 and 76 are compared to measured process parameters 60 in PID loop 76 in order to generate output 64) to verify an operability of the at least one sensor (*not positively recited, no patentable weight*)" ("selects a rule from a set of rules comprising a plurality of commands that direct data analysis for each at

Art Unit: 2121

least one of measured process parameter, a derived quantity, a plurality of measured process parameters and a derived quantities associated with an equipment combination" (e.g. col. 3 line 63 to col. 4 line 12 and col. 9 lines 42-56); "recommends at least one of a mitigating procedure, a maintaining procedure, and an operation procedure" (e.g. col. 3 lines 45-49, sending new tuning parameters over the network for recommending of re-tuning the control element).

#### **Regarding claim 21**

Blevins teaches directs the computer to receive a plurality of process parameters from a portable data collector (e.g. col. 5 lines 35-41).

#### **Regarding claim 22**

Blevins teaches directs the computer to receive a plurality of process parameters from an online process monitor (e.g. col. 5 line 57 to col. 6 line 11).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blevins et al. US 6,445,962 in view of Kicinski et al. US 6,405,139.

**Regarding claim 1**

Blevins teaches "A method for operating a facility having a plurality of equipment combinations, each equipment combination is operable, interactively with at least one other equipment combination" (e.g. FIG. 1, plurality of devices communicate interactively with one another as in col. 3 lines 22-49 and col. 6 lines 1-6), "said method comprising: receiving a plurality of measured process parameters, in real-time, for each of the plurality of equipment combinations" (e.g. col. 3 lines 37-49 and col. 7 lines 2-16, measured data are collected); "determining at least one derived quantity from-the plurality of measured process parameters" (e.g. col. 3 lines 40-45 and col. 9 lines 57-63, using sets of rules to determine new tuning parameters) wherein the derived quantity is compared to a measured process parameter (e.g., Fig. 3: auto-tuning parameters derived in blocks 66 and 76 are compared to measured process parameters 60 in PID loop 76 in order to generate output 64) to verify an operability of the at least one sensor (*not positively recited, no patentable weight*); "and recommending a change to an equipment operation based on the measured process parameters and the derived quantities" (e.g. col. 3 lines

Art Unit: 2121

45-49, sending new tuning parameters over the network for recommending of re-tuning the control element).

Blevins does not specifically disclose the equipment combinations include at least a driver machine and a driven machine.

However, Kicinski shows that the equipments combination includes a driver machine (motor) and a driven machine (pump) (e.g. FIG. 3).

Therefore, it would have been obvious that the substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Thus, it would have been obvious simple substitution of the equipment combination of Blevins with the equipment combination of Kicinski would have yield predictable results to one of ordinary skill in the art at the time of the invention.

#### **Regarding claim 2**

Blevins teaches wherein receiving, in real-time, for each of the plurality of equipment combinations and for the at least one individual piece of equipment further comprises receiving measured process parameters intermittently (e.g. col. 7 lines 2-9).

#### **Regarding claim 3**

Blevins teaches wherein determining at least one derived quantity comprises determining at least one derived quantity in real-time (e.g. col. 9 lines 27-37).



**Regarding claim 4**

Blevins teaches determining at least one derived quantity comprises: receiving measured process parameters associated with each of the derived quantities; and determining each of the derived quantities using at least one rule from a rule set (e.g., col. 3 lines 37-45).

**Regarding claim 5**

Blevins teaches generating a rule set for an equipment combination using at least one of the measured process parameters, the derived quantities, a design specification for the equipment combination, a maintenance history of the equipment combination, and an expert database (e.g. col. 9 lines 38-56).

**Regarding claim 6**

Blevins teaches receiving technical information from an online interactive technical manual for at least one equipment combination (e.g. col. 5 lines 1 - 18).

**Regarding claim 7**

Blevins teaches receiving measured process parameters from a remote input/output device (e.g. col. 5 lines 35-41).

**Regarding claim 8**

Blevins teaches receiving measured process parameters from a portable data logger (e.g. col. 5 lines 35-41).

***Allowable Subject Matter***

Claims 9-19 are allowed, as previously noted by the previous examiner of record.

The following is an examiner's statement of reasons for allowance:

These claims were allowed by the previous examiner of record due to Applicant's persuasive arguments filed 07/05/07.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action (with respect to 35 U.S.C. 112 2<sup>nd</sup>). Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (571) 272-3742. The examiner can normally be reached on 10:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ryan A. Jarrett/  
Primary Examiner, Art Unit 2121

07/08/08